

IN THE DRAWINGS

The attached sheet of drawings includes changes to Figs. 9 and 13A. These sheets, which includes Figs. 9 and 13A, replaces the original sheets including Figs. 9 and 13A..

Attachment: Replacement Sheets (2)

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-2, 4-18 and 22-24 are presently active in this case, Claim 1 amended and claim 3 canceled by way of the present Amendment.

In the outstanding Official Action, the drawings were objected to, and claims 1-10 and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,007,355 to Shibata et al. in view of U.S. Patent No. 5,310,356 to Obata et al.

First, Applicants wish to thank Examiner Le for the February 14th and 23rd telephone interviews at which time the outstanding issues in this case were discussed. During the interviews, Examiner Le indicated that the pending claims would patentably define over the art of record (including Shibata et al. and Obata et al. cited in the outstanding office action) and be in condition for allowance if the single ribbon conductor were specified to have a “relatively large width for providing high current capacity.” However, Applicants declined to make this amendment prior to receiving an Office Action based on the newly discovered references.

With regard to the objection to the drawings, Figures 9 and 13A have now been labeled “PRIOR ART” in the attached replacement sheets. Therefore, the objection to the drawings is overcome.

The specification has been amended to correct a typographical error.

Turning now to the prior art rejection, in order to expedite issuance of the patent in this case, Applicants have amended independent Claim 1 to clarify the patentable features of the present invention over the cited references. Specifically, Applicants’ Claim 1, as amended, recites a rotary connector having a first part and a second part rotationally coupled to the first part to form an interior of the rotary connector. Also recited is a first flat cable

having a single ribbon conductor *which has a relatively large width for providing input and output high current*, and a second flat cable *for providing separate current sources to the rotary connector*, wherein the second flat cable has multiple conductor wires wherein the first and second flat cables are housed within the interior of the rotary connector and each of the first and second flat cables extend in a circumferential direction about an axis of rotation of the rotary connector. Further included is an overcurrent protection device housed within an integral space of the rotary connector and configured to provide overcurrent protection for at least one of the first and second flat cables.

Thus, Applicants have amended Claim 1 to recite the “relatively large width” limitation suggested by Examiner Le in the February 14th and 23rd discussions to distinguish the claims over the prior art of record (including Shibata et al. and Obata et al. cited in the outstanding office action) and place this case in condition for allowance. Therefore, amended Claim 1 and Claims 2, 4-18 and 22-24 depending therefrom are in condition for allowance. In addition, the cited reference to Shibata et al. discloses a rotary connector having an improved connection point at the junction of an outer cable leading to the connector and an inner cable that is wrapped in a circumferential direction within the connector. Specifically, Figures 1, 2, 4 and 7 of Shibata et al. show an outer cable 5 (5A and 5B) leading to a junction point (6 or 11), which in turn connects to a flat cable 4 that is wound around the conductor interior. However, the outer cable 5 is not housed within the interior of the connector housing 2, let alone extending in a lone circumferential direction within the connector. In this regard, Applicants submit that the outer conductor 5A and 5B of Shibata et al. correspond to the rotary junction 410d and stationary junction 411f in Fig. 4 of the present application, which are not housed in the rotary connector. Thus, Shibata et al. does not disclose that the first and second flat cables (each conducting) are housed within said interior of the rotary connector as also required by Claim 1. The cited reference to Obata et al. discloses a flexible flat conductor cable 11 and 3 dummy cables 21A, B and C provided

within a housing. Thus, Obata et al. does not correct this deficiency. This provides an additional basis for patentability of Claim 1 over the cited references.

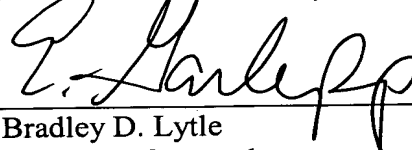
Applicants further note that Claim 1 has also been amended to recite that the second flat cable provides separate current sources to the rotary connector in order to further clarify that the first flat cable is a single ribbon conductor while the second flat cable includes multiple conductor wires. In contrast, the outer cable 5 and inner cable 4 of Shibata et al each include multiple conductors. As noted above, the cited reference to Obata et al. discloses a flexible flat conductor cable 11 and 3 dummy cables 21A, B and C provided within a housing, and thus Obata et al. does not correct the deficiency of Shibata et al. This provides an additional basis for patentability of Claim 1 over the cited references.

For the reasons discussed above, Applicants' independent Claim 1 patentably defines over the cited references. Moreover, as Claims 2-10 and 22-24 depend from Claim 1, these claims also patentably define over the cited references.

Consequently, in view of the present Amendment, no further issues are believed to be outstanding on the present application. The present application is believed to be in condition for formal allowance. An early and favorable action is therefore respectfully requested.

Respectfully submitted,

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